From: gt4000@dnvps.com [gt4000@dnvps.com]

Sent: 3/6/2014 12:44:17 PM

To: Robert Love [rlove@aet-tankers.com]

CC: Eagle Louisiana [eagle.louisiana@aet-tankers.com]; AETSM - Team Atlantic [Team-Atl@aet-tankers.com]

Subject: EAGLE LOUISIANA, FUEL ANALYSIS REPORT, GIBRALTAR, 28-FEB-2014, SAMPLE: ROT1408144

To: AMERICAN EAGLE TANKERS, INC. Attn: Mr Robert Love, Bunker Manager

Attn: Atlantic Fleet

Cc: The Master Of 'EAGLE LOUISIANA'

Attn: Chief Engineer

Sample Number

DNV Petroleum Services - Fuel Analysis Report dated: 06-Mar-2014

Vessel: EAGLE LOUISIANA (9518892)

| Dampie Namber | | | 1011100111 |
|--------------------------|---------------------------------------|-------------|----------------------|
| Product Type | | | (LSFO) |
| Bunker Port | | | GIBRALTAR |
| Bunker Date | | | 28-Feb-2014 |
| Sampling Point | | | SHIP MANIFOLD |
| Sampling Method | | | CONTINUOUS DRIP |
| Sent From | | | MALAGA |
| Date Sent | | | 04-Mar-2014 |
| Arrived at Lab | | | 05-Mar-2014 |
| Supplier | | | PENINSULA |
| Loaded From | | | CLIPPER BRICCO |
| Quantity per C.Eng. | | | 950 |
| | | | |
| Seal data | | DNVPS, | SEAL INTACT, 8058396 |
| Related Samples | | | |
| Supplier | | | 8058397 |
| Ship | | | 8058398 |
| Ship | | | 8058399 |
| SHIP MARPOL | | | 8058400 |
| MARPOL | | | 30267 |
| | | | |
| Receipt Data | | <u>Unit</u> | |
| Source Of Data | | | B.D.N. |
| Density @ 15°C | | kg/m³ | 988.7 |
| Viscosity @ 50°C | | mm^2/s | 377.3 |
| Sulfur | | % m/m | 0.97 |
| Volume @ 15°C | | m^3 | 961.335 |
| Quantity | | MT | 950.472 |
| Tested Parameter | Unit | Result | RMG380 |
| Density @ 15°C | kg/m³ | 990.7 | 991.0 |
| Viscosity @ 50°C | mm²/s | 402.4 | 380.0 |
| Water | % V/V | 0.1 | 0.5 |
| Micro Carbon Residue | % m/m | 17 | 18 |
| Sulfur | % m/m | 1.04 | 1.00 |
| Total Sediment Potential | % m/m | LT 0.01 | 0.10 |
| Ash | % m/m | 0.05 | 0.15 |
| Vanadium | mg/kg | 113 | 300 |
| Sodium | mg/kg | 19 | |
| Aluminium | mg/kg | 7 | |
| | , , , , , , , , , , , , , , , , , , , | | |

ROT1408144

| Silicon | mg/kg | 9 | |
|-------------------------|----------|---------|----|
| Iron | mg/kg | 34 | |
| Nickel | mg/kg | 80 | |
| Calcium | mg/kg | 2 | |
| Magnesium | mg/kg | 3 | |
| Zinc | mg/kg | LT 1 | |
| Phosphorus | mg/kg | LT 1 | |
| Potassium | mg/kg | LT 1 | |
| Pour Point | °C | LT 24 | 30 |
| Flash Point | °C | GT 70 | 60 |
| Acid Number | mg KOH/g | LT 0.10 | |
| Strong Acid Number | mg KOH/g | 0.00 | |
| Calculated Values | | | |
| Aluminium + Silicon | mg/kg | 16 | 80 |
| Net Specific Energy | MJ/kg | 40.82 | |
| CCAI (Ignition Quality) | | 851 | |
| Quantity (Weight) | MT | 951.337 | |
| Quantity Difference | MT | 0.865 | |
| | | | |

Note:

LT means Less Than, GT means Greater Than. Quantity (Weight) is based on BDN Volume, DNVPS Density and a weight factor of 1.1 kg/m^3 (ASTM D1250-80 Table 56).

Specification Comparison:

Results compared with your amended ISO 8217:2005 specification RMG380, table 2. Based on this sample please note the following:

- Marginally Above : Viscosity @ 50°C, Sulfur

Note: Viscosity @ 50°C, Sulfur have been retested and confirmed.

Operational Advice :

Approximate fuel temperatures:

Injection:

145°C for 10 mm²/s 130°C for 15 mm²/s 115°C for 20 mm²/s 110°C for 25 mm²/s

Transfer: 45°C

Sulfur - Based on this commercial sample, the fuel oil is potentially non-compliant if used within a designated Emission Control Area (ECA, ref MARPOL Annex VI Reg. 14(4)). It is recommended that the situation is recorded through a notification or Note of Protest (NoP) issued by the Master. Only the relevant official authorities can then advise on any further action necessary. Please note that the official MARPOL sample provided by the supplier is the governing sample regarding compliance with this statutory requirement. For assistance issuing the Note of Protest, please refer to DNVPS' Instruction Manual.

Best Regards, On behalf of DNV Petroleum Services Pte Ltd Arent Jansen Technical Advisor End of Report for EAGLE LOUISIANA

If not properly aligned, please change font to Courier New, size 10.

Reference to part(s) of this report which may lead to misinterpretation is prohibited.

For technical or operational advice or further information on this report please contact your nearest DNVPS office or contact us directly at

Tel : +31 10 2922600 Email : tvpnl155@dnvps.com
